

Project Title	Funding	Institution
Understanding the Genetic Architecture of Rett Syndrome - an Autism Spectrum Disorder	\$30,000	Cold Spring Harbor Laboratory
TrkB agonist therapy for sensorimotor dysfunction in Rett syndrome	\$147,806	Case Western Reserve University
Translational Regulation of Adult Neural Stem Cells	\$372,621	University of Wisconsin
Translational dysregulation in autism pathogenesis and therapy	\$125,000	Massachusetts General Hospital
Translation, Synchrony, and Cognition	\$376,430	New York University
TMLHE deficiency and a carnitine hypothesis for autism	\$0	Baylor College of Medicine
The role of UBE3A in autism: Is there a critical window for social development?	\$108,900	Erasmus University Medical Center
The role of UBE3A in autism	\$125,001	Harvard Medical School
The role of Shank3 in neocortex versus striatum and the pathophysiology of autism	\$25,000	Duke University
THE ROLE OF MECP2 IN RETT SYNDROME	\$353,130	University of California, Davis
THE ROLE OF MECP2 IN RETT SYNDROME	\$100,000	University of California, Davis
The Role of Glia in Fragile X Syndrome	\$60,000	Johns Hopkins University
Tet-mediated Epigenetic Modulation in Autism	\$684,145	Emory University
Testing the ribosomal protein S6 as treatment target and biomarker in autism spectrum disorders	\$59,995	Cincinnati Children's Hospital Medical Center
Targeting the PI3K Enhancer PIKE to Reverse FXS-associated Phenotypes	\$206,000	Emory University
Studying Rett and Fragile X syndrome in human ES cells using TALEN technology	\$30,000	Whitehead Institute for Biomedical Research
Role of UBE3A in the Central Nervous System	\$321,269	University of North Carolina
Role of Serotonin Signaling during Neural Circuitry Formation in Autism Spectrum Disorders	\$0	Massachusetts Institute of Technology
Role of MEF2 and neural activity in cortical synaptic weakening and elimination	\$387,160	UT SOUTHWESTERN MEDICAL CENTER
Role of GABA interneurons in a genetic model of autism	\$187,455	Yale University
Role of astrocytic glutamate transporter GLT1 in Fragile X	\$0	Tufts University
Revealing protein synthesis defects in Fragile X Syndrome with new chemical tools	\$347,427	Stanford University
Restoring cortical plasticity in a Rett mouse model	\$0	Stanford University
Rapid screening for cortical circuit dysfunction in autism-related mouse models	\$59,835	University of California, Berkeley
Profiles and Predictors of Pragmatic Language Impairments in the FMR1 Premutation	\$53,132	UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA
Probing the neural basis of social behavior in mice	\$62,500	Massachusetts Institute of Technology
Probing the Molecular Mechanisms Underlying Autism: Examination of Dysregulated Protein Synthesis	\$51,400	National Institutes of Health
Probing synaptic receptor composition in mouse models of autism	\$249,994	Boston Children's Hospital
Presynaptic Fragile X Proteins	\$249,000	DREXEL UNIVERSITY

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Predicting Phenotypic Trajectories in Prader-Willi Syndrome	\$302,050	Vanderbilt University
Pragmatic language and social-emotional processing in autism, fragile X, and the FMR1 premutation	\$24,898	NORTHWESTERN UNIVERSITY
Physiological studies in a human stem cell model of 15q duplication syndrome	\$0	University of Connecticut
Phenotypic Characterization of MECP2 Mice	\$66,830	Children's Hospital of Philadelphia
Phagocytosis is misregulated in a Drosophila model of Fragile X syndrome	\$27,349	Columbia University
Novel candidate mechanisms of fragile X syndrome	\$248,873	UNIVERSITY OF MICHIGAN
New Models For Astrocyte Function in Genetic Mouse Models of Autism Spectrum Diso	\$396,250	CLEVELAND CLINIC LERNER COM-CWRU
Neurotrophic Factor Regulation of Gene Expression	\$615,631	HARVARD MEDICAL SCHOOL
Neuropathology of the Shank3 mouse model for autism	\$1,100	University of Louisville
Neurobiology of RAI1, the causal gene for Smith-Magenis syndrome	\$0	Stanford University
Neurobiological Mechanism of 15q11-13 Duplication Autism Spectrum Disorder	\$376,818	BETH ISRAEL DEACONESS MEDICAL CENTER
Neuroactive Steroid GABAA Receptor Positive Modulators for Fragile X Syndrome	\$62,748	SAGE THERAPEUTICS, INC.
Neural mechanisms underlying autism behaviors in SCN1A mutant mice	\$200,000	University of Washington
Neural Correlates of the Y Chromosome in Autism: XYY Syndrome as a Genetic Model	\$290,609	Children's Hospital of Philadelphia
Neural Correlates of the Y Chromosome in Autism: XYY Syndrome as a Genetic Model	\$153,479	Nemours Children's Health System, Jacksonville
Neural and cognitive discoordination in autism-related mouse models	\$277,072	New York University
Multigenic basis for autism linked to 22q13 chromosomal region	\$249,999	Hunter College of the City University of New York (CUNY) jointly with Research Foundation of CUNY
mTOR modulation of myelination	\$179,659	Vanderbilt University
MRI Biomarkers of Patients with Tuberous Sclerosis Complex and Autism	\$716,468	CHILDREN'S HOSPITAL CORPORATION
Mouse Model of Dup15q Syndrome	\$670	Texas AgriLife Research
Motor cortex plasticity in MeCP2 duplication syndrome	\$62,500	Baylor College of Medicine
Modeling Pitt-Hopkins Syndrome, an Autism Spectrum Disorder, in Transgenic Mice Harboring a Pathogenic Dominant Negative Mutation in TCF4	\$30,000	University of North Carolina
Modeling Microglial Involvement in Autism Spectrum Disorders, with Human Neuro-glial Co-cultures	\$0	Whitehead Institute for Biomedical Research
MicroRNAs in Synaptic Plasticity and Behaviors Relevant to Autism	\$131,220	Massachusetts General Hospital
Mesocorticolimbic dopamine circuitry in mouse models of autism	\$174,944	Stanford University
MeCP2 Modulation of BDNF Signaling: Shared Mechanisms of Rett and Autism	\$371,057	UNIVERSITY OF ALABAMA AT BIRMINGHAM

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Mechanisms Underlying the Cerebellar Contribution to Autism in Mouse Models of Tu	\$190,458	CHILDREN'S HOSPITAL CORPORATION
Mechanisms of synapse elimination by autism-linked genes	\$150,000	University of Texas Southwestern Medical Center
Mechanisms of Motor Skill Learning in the Fragile X Mouse Model	\$299,510	University of Nebraska
Mechanisms of mGluR5 function and dysfunction in mouse autism models	\$405,319	UT SOUTHWESTERN MEDICAL CENTER
Mechanisms and Rescue of Neural Circuit Dysfunction in Mecp2 Mutant Mice	\$92,578	BAYLOR COLLEGE OF MEDICINE
Mapping the Neurobehavioral Phenotype in Phelan McDermid Syndrome	\$35,000	ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI
MAGEL2, a candidate gene for autism and Prader-Willi syndrome	\$52,224	University of Alberta
Longitudinal MRI Study of Brain Development in Fragile X	\$773,954	Stanford University
Linking genetic mosaicism, neural circuit abnormalities and behavior	\$62,500	Brown University
Linking circuit dynamics and behavior in a rat model of autism	\$196,290	University of California, San Francisco
Language Development in Fragile X Syndrome	\$516,736	University of California, Davis
Investigating the role of Tsc1 in neocortical circuit assembly	\$47,114	Stanford University
Imaging of protein synthesis and ubiquitination in fragile x syndrome	\$234,000	Emory University
Identification of TSC cellular phenotypes using patient-derived iPSCs	\$229,322	Rutgers University
Genotype-Phenotype Relationships in Fragile X Families	\$564,704	University of California, Davis
Genotype-Phenotype Relationships in Fragile X Families	\$55,440	University of California, Davis
Genetic Modifiers of Seizure Disorders in Fragile X Syndrome	\$261,539	Emory University
Genetic contribution to language-related preclinical biomarkers of autism	\$0	University of Pennsylvania
Genetic and Developmental Analyses of Fragile X Mental Retardation Protein	\$394,554	Vanderbilt University
Genetically defined stem cell models of Rett and fragile X syndrome	\$175,000	Whitehead Institute for Biomedical Research
GABA and Gamma-band Activity: Biomarker for ASD?	\$0	University of Pennsylvania
Functional and anatomical recovery of synaptic deficits in a mouse model of Angelman Syndrome	\$0	University of North Carolina
Fragile X syndrome target analysis and its contribution to autism	\$249,272	Vanderbilt University
FMRP regulates the pruning of cell-to-cell connections in the neocortex	\$79,500	UT SOUTHWESTERN MEDICAL CENTER
Emergence and Stability of Autism in Fragile X Syndrome	\$358,000	UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA
Dysregulation of Protein Synthesis in Fragile X Syndrome	\$1,060,826	National Institutes of Health
Dysregulation of mTOR Signaling in Fragile X Syndrome	\$487,251	ALBERT EINSTEIN COLLEGE OF MEDICINE
Dysregulation of Mdm2-mediated p53 ubiquitination in autism mouse models	\$60,000	University of Illinois at Chicago
Dissecting the 16p11.2 CNV endophenotype in induced pluripotent stem cells	\$51,400	University of California, San Francisco
Development and afferent regulation of auditory neurons	\$386,250	University of Washington

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Dendritic 'translatome' in fragile X syndrome and autism	\$60,000	University of Michigan
Cortico-striatal dysfunction in the eIF4E transgenic mouse model of autism	\$124,496	New York University
Cortical inhibition and disrupted vocal perception in MeCP2 +/- mice	\$81,970	Cold Spring Harbor Laboratory
Cortactin and Spine Dysfunction in Fragile X	\$33,319	University of California, Irvine
Connections between autism, serotonin and hedgehog signaling	\$0	Medical Research Council-National Institute for Medical Research
Characterizing 22q11.2 abnormalities	\$124,995	Children's Hospital of Philadelphia
Cerebellar plasticity and learning in a mouse model of autism	\$60,000	University of Chicago
Bi-directional regulation of Ube3a stability by cyclic AMP-dependent kinase	\$0	University of North Carolina
BDNF and the Restoration of Synaptic Plasticity in Fragile X and Autism	\$453,289	University of California, Irvine
Autism phenotypes in Tuberous Sclerosis: Risk factors, features & architecture	\$149,044	King's College London
A Novel Glial Specific Isoform of Cdkl5: Implications for the Pathology of Autism in Rett Syndrome	\$0	University of Nebraska
A Novel Essential Gene for Human Cognitive Function	\$35,030	HARVARD MEDICAL SCHOOL
Analysis of MEF2 in Cortical Connectivity and Autism-Associated Behaviors	\$53,282	MCLEAN HOSPITAL
Alteration of Dendrite and Spine Number and Morphology in Human Prefrontal Cortex of Autism	\$0	University of California, Davis
A Longitudinal MRI Study of Brain Development in Fragile X Syndrome	\$548,356	University of North Carolina
Allelic Choice in Rett Syndrome	\$390,481	WINIFRED MASTERSON BURKE MED RES INST
A Family-Genetic Study of Autism and Fragile X Syndrome	\$632,570	NORTHWESTERN UNIVERSITY
Activity-dependent phosphorylation of MeCP2	\$177,055	HARVARD MEDICAL SCHOOL
A cerebellar mutant for investigating mechanisms of autism in Tuberous Sclerosis	\$149,937	Boston Children's Hospital
Aberrant synaptic form and function due to TSC-mTOR-related mutation in autism spectrum disorders	\$0	Columbia University
16p11.2 rearrangements: Genetic paradigms for neurodevelopmental disorders	\$100,000	University of Lausanne

